

Features:

- Two anti-parallel thyristors on one Si-wafer
- Hermetic metal cases with ceramic insulators
- Capsule packages for double sided cooling

Typical Applications

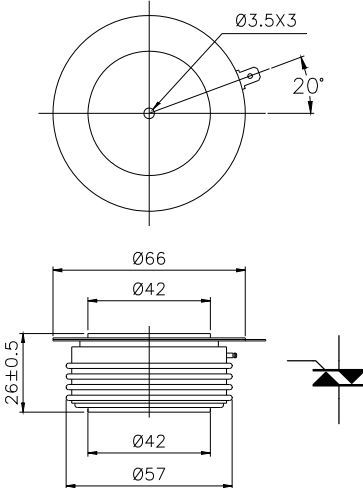
- High power industrial and power transmissior
- DC and AC motor control
- AC controllers

Part No. Y40KSE-KT39cT

I_{T(RMS)}	930A	
V_{DRM}, V_{RRM}	500V	800V
	1000V	1200V
	1400V	1600V
	1800V	

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min	Type	Max	
I _{T(RMS)}	RMS current	50Hz sine wave Double side cooled,	T _c =55°C	125		1330	A
			T _c =85°C	125		930	
V _{DRM}	Repetitive peak reverse voltage	V _{DRM} tp=10ms V _{DSM} = V _{DRM} + 100V	125	500		1800	V
I _{DRM}	Repetitive peak current	at V _{DRM}	125			50	mA
I _{TSM}	Surge on-state current	10ms half sine wave V _R =0.6V _{RRM}	125			8.8	kA
I ² t	I ² t for fusing coordination					387	A ² s*10 ³
V _{TO}	Threshold voltage		125			0.78	V
r _T	On-state slope resistance					0.89	mΩ
V _{TM}	Peak on-state voltage	I _{TM} =1200A, F=18kN	25			2.70	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =0.67V _{DRM}	125			50	V/μs
di/dt	Critical rate of rise of on-state current	V _{DM} = 67%V _{DRM} to 1000A, Gate pulse t _r ≤0.5μs I _{GM} =1.5A Repetitive	125			50	A/μs
I _{GT}	Gate trigger current	V _A =12V, I _A =1A	25	20		350	mA
V _{GT}	Gate trigger voltage			0.8		3.5	V
I _H	Holding current			20		400	mA
I _L	Latching current					500	mA
V _{GD}	Non-trigger gate voltage	V _{DM} =67%V _{DRM}	125			0.3	V
R _{th(j-c)}	Thermal resistance Junction to case	double side cooled Clamping force 18kN				0.028	°C / W
R _{th(c-h)}	Thermal resistance case to heat sink					0.0075	
F _m	Mounting force			15		20	kN
T _{vj}	Junction temperature			-40		125	°C
T _{stg}	Stored temperature			-40		140	°C
W _t	Weight					320	g
Outline	KT39cT40						

Outline:



TECHSEM reserves the right to change specifications without notice.

